

From: [ANDERSON Jim M](#)
To: [Kristine Koch/R10/USEPA/US@EPA](#); [Chip Humphrey/R10/USEPA/US@EPA](#)
Cc: [GAINER Tom](#); [MCCLINCY Matt](#); [PETERSON Jenn L](#); [POULSEN Mike](#); [TARNOW Karen E](#)
Subject: LWG's Alt Screening & 6/22/11 mtg
Date: 04/29/2011 11:12 AM

Kristine & Chip,

Here are DEQ's comments on the LWG's 4/12/11 "Alternative (Alt) Screening" mtg/slides & our expectations for the 6/22/11 "FS Key Elements" mtg.

LWG's 4/12/11 "Alt Screening" mtg & slides

1) Did the 4/12/11 "Alt Screening" mtg meet the understood objective? No. EPA met with certain senior members of the LWG 3/16/11 in Seattle. DEQ didn't participate in that meeting, but I understand you all discussed how to communicate more effectively, how to better move the project forward, & what the scope of the 4/12/11 "Alt Screening" mtg would be. EPA followed-up on the 3/16 mtg with a 3/17 e-mail regarding submittal dates for the revised RI/BRA & draft FS reports. The LWG followed that up with a 3/18 letter agreeing to the project schedule EPA laid-out in your 3/17 e-mail. In their 3/18 letter, the LWG also described the scope of the alternatives screening analysis requested by 4/12/11. In their 3/18 letter, the LWG said they would determine site-wide GRAs, conduct a site-wide technology screen, & evaluate & screen each GRA & technology for each of the AOPCs. So in that sense..., in the 4/12/11 mtg..., the LWG did meet their stated objective for the meeting.

Although the LWG clearly described in their 3/18 letter what they planned to present in the 4/12 Alt Screening mtg..., what the LWG presented 4/12 was not what DEQ had previously expected them to present. Prior to the LWG's 3/18 letter, we had expected the LWG to present..., in the 4/12 mtg..., their development of alternatives (i.e., assembled technologies representing a range of actions) & the screening of those alternatives. We expected to see an evolved form of the 2 matrices the LWG presented in the 11/17/09 "FS – Example Alternative Development & Screening Evaluation" mtg. We expected to see those 2 matrices because in fall 2010 that's what the LWG told us they'd present in the "Alt Development & Screening" mtg scheduled for 12/14/10. We expected to see those 2 matrices completed for all the AOPCs. After all, the title of the LWG's 4/12/11 presentation was "Alternatives Screening" ..., no alternatives were presented..., only technologies (or perhaps at most..., process options) were presented.

In their 3rd slide from the 4/12/11 mtg, the LWG says their 4/12 presentation "is intended to meet the requirements of EPA's February 25, 2011 letter for an "Alternative Screening Analysis". On page 5 of your 2/25/11 letter, EPA clearly describes your expectations for the Alternative Development & Screening. One of your stated expectations from that letter is

that the LWG “assemble and screen site-wide Remedial Action Alternatives”. Perhaps in your 3/16/11 mtg EPA modified the requirements you included in your 2/25 letter..., particularly the requirement that the LWG “assemble and screen site-wide Remedial Action Alternatives”.

We think the biggest disconnect or failed expectation is that the LWG presented & screened technologies..., not alternatives. Perhaps that’s the best we can expect & require for this mega-sediment site. Perhaps we can’t expect or require the LWG to assemble technologies into alternatives & screen a range of alternatives on an AOPC or sub-AOPC basis. But if we can’t expect that, there will be a lot of uncertainty as to what the LWG will present as a draft FS.

2) Dry excavation (Slides 6 & 25)- The LWG did not mention dry excavation using a cofferdam. This would be an extremely expensive alternative, but effective & implementable..., & it has been done at other sites in the nation. One additional advantage of dry excavation is the ability to better manage dredging-caused residuals, releases, & resuspension.

3) Sediment Management Areas (SMAs, Slides 10 & 39 & Table 2)- The LWG introduced a new (at least to us) definition of SMA in the 4/12/11 mtg. The LWG defined SMAs as areas requiring active remediation (i.e., capping or dredging)...., as opposed to EMNR or MNR. As I said in an 4/20/11 e-mail to you, I’m fine with the LWG’s definition of SMAs..., it’s not how we originally understood SMAs..., but if we can all agree..., then at least it’s a common understanding of the term. What we’re still unclear about is what defines an SMA. Apparently the LWG says that RALs will define SMA, but even when pressed..., the LWG will not describe how they plan to develop RALs. Will they be some multiplication of a PRGs, RBCs, etc? Will they result from hilltopping? We think it’s very important for EPA/partners to understand..., & at least accept on a conceptual level..., how the LWG will develop RALs before they launch into a time-consuming effort of using RALs to define SMAs for the 6/22/11 mtg.

It’s apparent from the footnote in Table 2 that in areas that show unacceptable risk..., but are outside of SMAs..., the only technology the LWG plans to considered is MNR. The LWG must consider a range of alternatives (or even technologies). That range of alternatives can be focused on the less aggressive alternatives, but right now the only alternative (or technology) the LWG is considering in these non-SMA areas is MNR.

4) Hot Spots of contamination (Slide 11)- DEQ identifies Hot Spots on a point-by-point basis. This concept is contrary to the LWG’s position on Slide 11 which dismisses high concentrations of buried sediment that may be exposed as only being a concern if they impact the SWAC.

- 5) Dredging under docks & overwater structures (Slides 25-31)- We heard a mixed message in the 4/12 meeting. On the one hand, LWG said that dredging under & around docks & overwater structures was largely a case-by-case evaluation..., not appropriate for the FS..., & better dealt with during remedial design. On the other hand, the LWG is screening out dredging around certain structures (Slide 3). If dredging is screened out, it will be difficult to consider dredging on a case-by case basis during remedial design. It's clear that an understanding needs to be reached as to how dredging around structures in the FS & RD/RA processes will be addressed.
- 6) Upland access to land-based dredging (Slide 30)- Riverbank cleanup &/or source control (e.g., riverbank reconfiguration) may result in improved access to land-based dredging. There are several key sites where riverbank cleanup work is expected: EOSM, Gunderson Area 3, Arkema, & Gasco. The LWG should consider possible land-based dredging from these sites.
- 7) Ex-situ sediment treatment & disposal (Slides 32-36)- Anchor suggested creating a placeholder for options of treating dredged material to levels above clean fill criteria (i.e., partial ex-situ treatment). That partially treated material may have a beneficial use such as cap base for an upland cleanup. We support Anchor's suggestion.

Expectations for 6/22/11 "FS Key Elements" Mtg

- 1) Overview of the framework or structure of the draft FS- This is perhaps the most important expectation we have for the 6/22 mtg..., the LWG should clearly describe the framework &/or structure of the draft FS
- 2) Defining a clear path to the draft FS Rpt- At the risk of grossly over-simplifying the process..., we understand there are 2 major elements in an FS. 1st, the alternative development & screening; & 2nd, the detailed evaluation of the alternatives that screen in. The LWG apparently wants EPA to give them the "green light" 6/22/11 to move forward with the 2nd step..., the detailed evaluation. We understand why the LWG needs that "green light" ASAP in order to produce the draft FS less than 5 months later. Although there's a lot of risk allowing the LWG to move forward with the detailed evaluation while not having an accepted, comprehensive alternative development & screening deliverable in-hand..., we think it's best to get the LWG's draft FS ASAP. However, we should go into the 6/22/11 meeting defining a path to the draft FS as clearly & simply as we can.
- 3) What guidance will the LWG follow in preparing the draft FS- The LWG should follow the major national EPA published guidance documents such as: 1) EPA, 1988 *"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA"*..., & 2) EPA, 2005 *"Contaminated Sediment remediation Guidance for Hazardous Waste Sites"*. The LWG should also follow important PH project documents such as: 1) LWG, 2004 *"PH*

Programmatic Work Plan” ..., 2) EPA, March 2008 “*EPA Guidance on the Portland Harbor Feasibility Study*” letter..., 3) EPA, 12/18/09 “*Remedial Action Alternative Development and Screening Evaluation*” letter..., 4) EPA, 12/21/10 “*Portland Harbor Feasibility Study*” letter..., & 5) EPA, 2/25/11 “*Schedule for Remedial Investigation (RI) and Feasibility Study (FS)*”.

4) How RALs were developed & how they will be used in the FS- We understand the LWG plans to develop RALs, & these RALs will be used to define SMAs (i.e., areas of active remediation..., i.e., capping &/or dredging). We would prefer to understand how the LWG developed & plans to use RALs before the 6/22 mtg, but we must know this by the 6/22 mtg at the latest. Furthermore, if we accept that RALs will define SMAs, what will define areas of unacceptable risk outside SMAs that the LWG wants to only consider MNR in? Will these be PRGs, benthic toxicity information, etc?

5) LWG should consider more than just MNR in AOPC-areas outside SMAs- We agree that MNR is likely the most reasonable remedial action in AOPC-areas outside of SMAs, but the LWG should at least take EMNR & capping thru the alternative screening process. Currently the LWG is only considering MNR in AOPC-areas outside SMAs. That’s not much of a feasibility study.

6) Will the LWG develop Remedial Action Alternatives (RAAs)- See Comment 1 on the 4/12/11 slides & mtg above. Basically, the LWG has identified & screened technologies, but has not assembled technologies into RAAs that represent a range of remedial actions. Will we ever see true “alternatives”?

7) What RAAs will the LWG carry forward into detailed evaluation in the FS- If the LWG plans to assemble technologies into RAAs that represent a range of remedial actions..., what are these RAAs that they will carry thru the detailed evaluation?

8) How will the “effectiveness” of RAAs be evaluated- Will the LWG consider concentration reduction, risk reduction, mass reduction, time to achieve RALs, etc?

9) How will the FS incorporate the need to meet or exceed ARARs-

10) Hot Spots or PTM areas- How will the FS consider hot spots of contamination or principal-threat material?

Jim Anderson

Manager, DEQ Portland Harbor Section

ph: 503.229.6825

fax: 503.229.6899

cell: 971.563.1434